

1901

THE  
NIAGARA AND  
LANCASTER  
PORTABLE FORGES,  
BLOWERS AND  
DRILLS

FOR  
EVERY CLASS  
OF WORK.

LANCASTER FORGE & BLOWER Co.

WORKS: LANCASTER, N. Y.

OFFICE: BUFFALO, N. Y.

# THE LANCASTER FORGE.



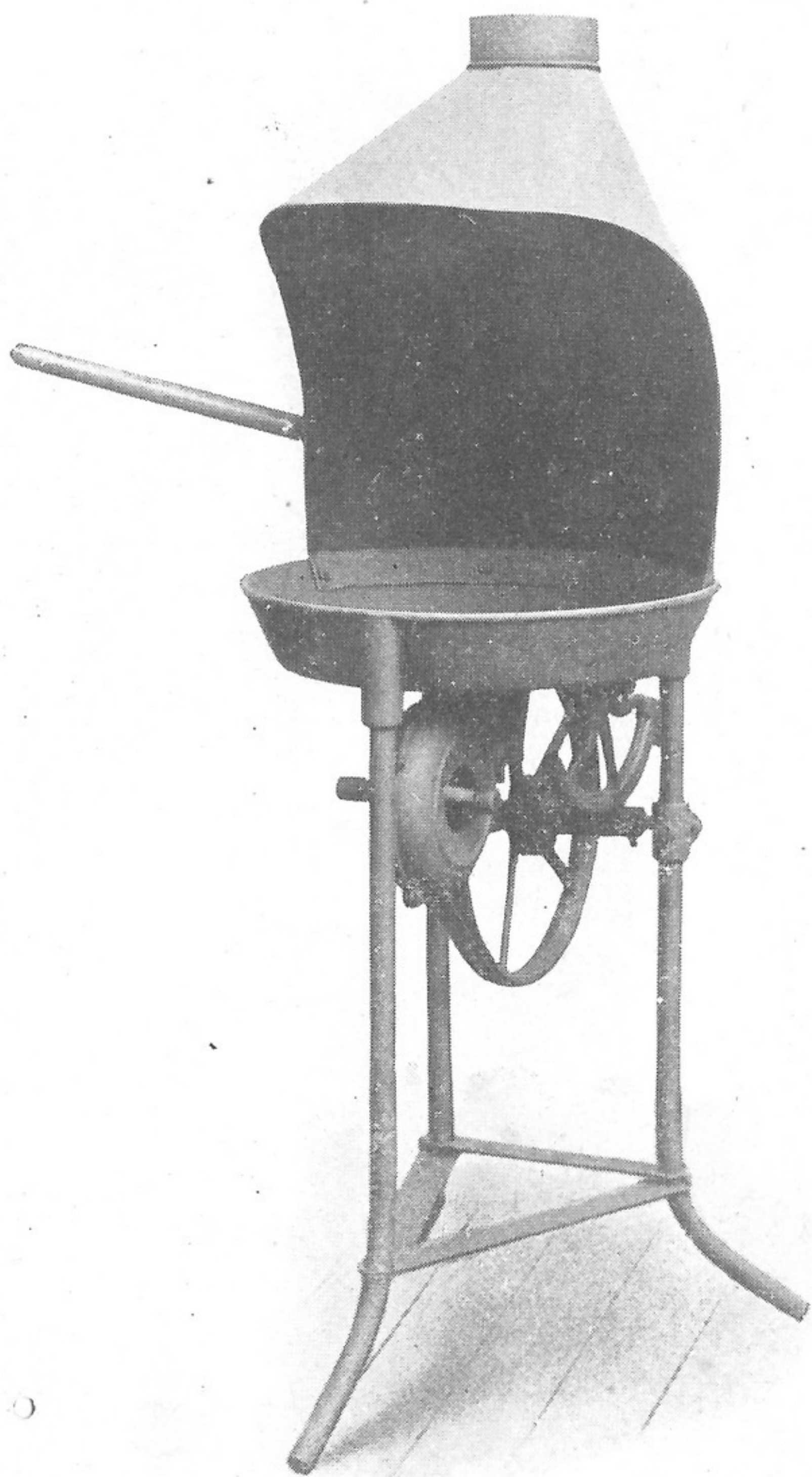
LANCASTER FORGE No. 100.

LANCASTER Forge No. 100, with wind guard; height 34 inches, diameter hearth 23 inches, weight 80 lbs. Price \$24.00.

This forge was designed to meet the demand for a high-power forge at a moderate price; adapted to steel construction gangs, railroad, bridge, tank builders and all outdoor riveting work. It is very substantially built to withstand the hard usage incidental to the class of work for which it is designed. The forge is operated by segment gear and ratchet which insures positive action under all conditions, with least possible wear and a very strong blast with moderate movement of the lever.



# THE LANCASTER FORGE.

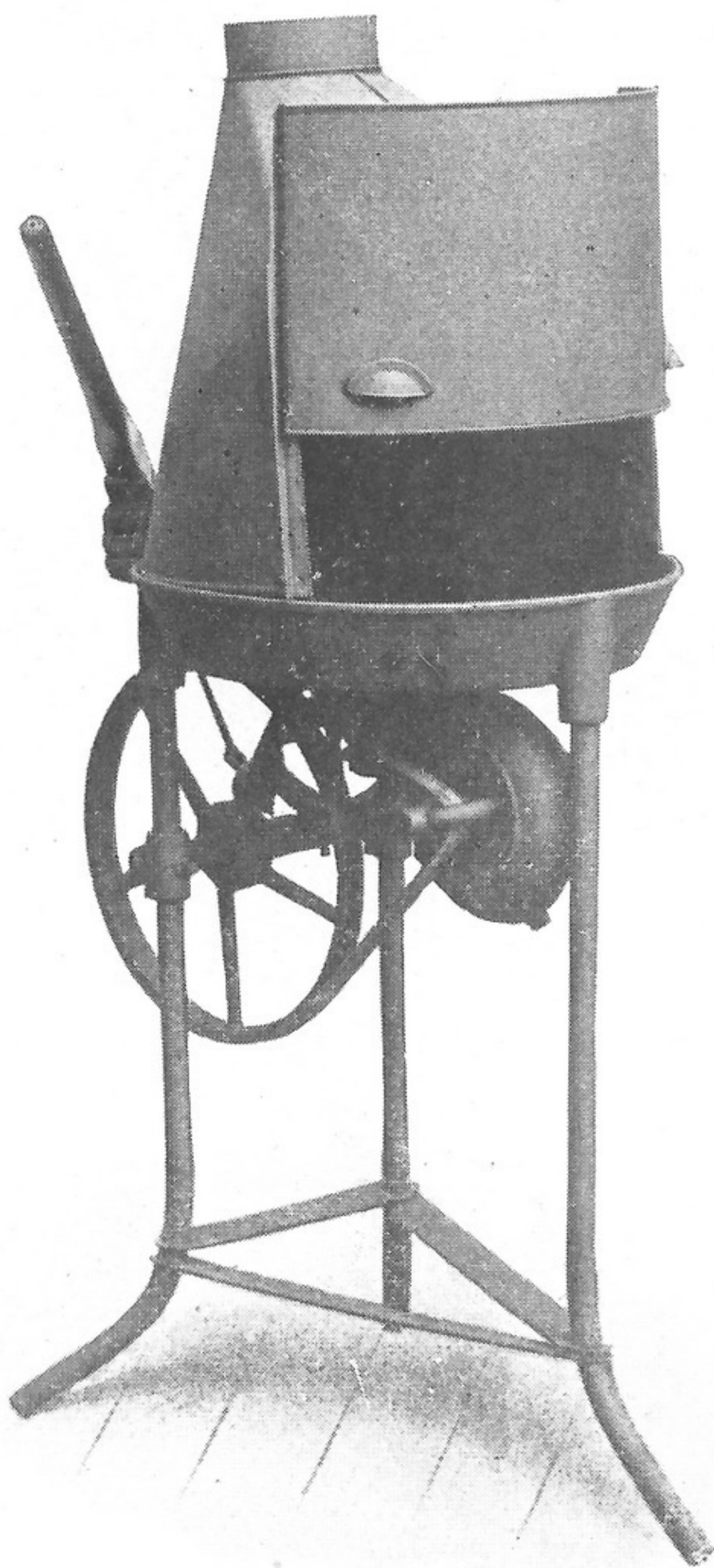


LANCASTER FORGE No. 101.

LANCASTER Forge No. 101, same dimensions and design as No. 100, but with half-open hood. Price \$27.00.

Adapted for use in machine shops, agricultural implement works, etc. The hood is made of heavy steel and designed so as to remove the smoke without interference to the work in progress.

# THE LANCASTER FORGE.



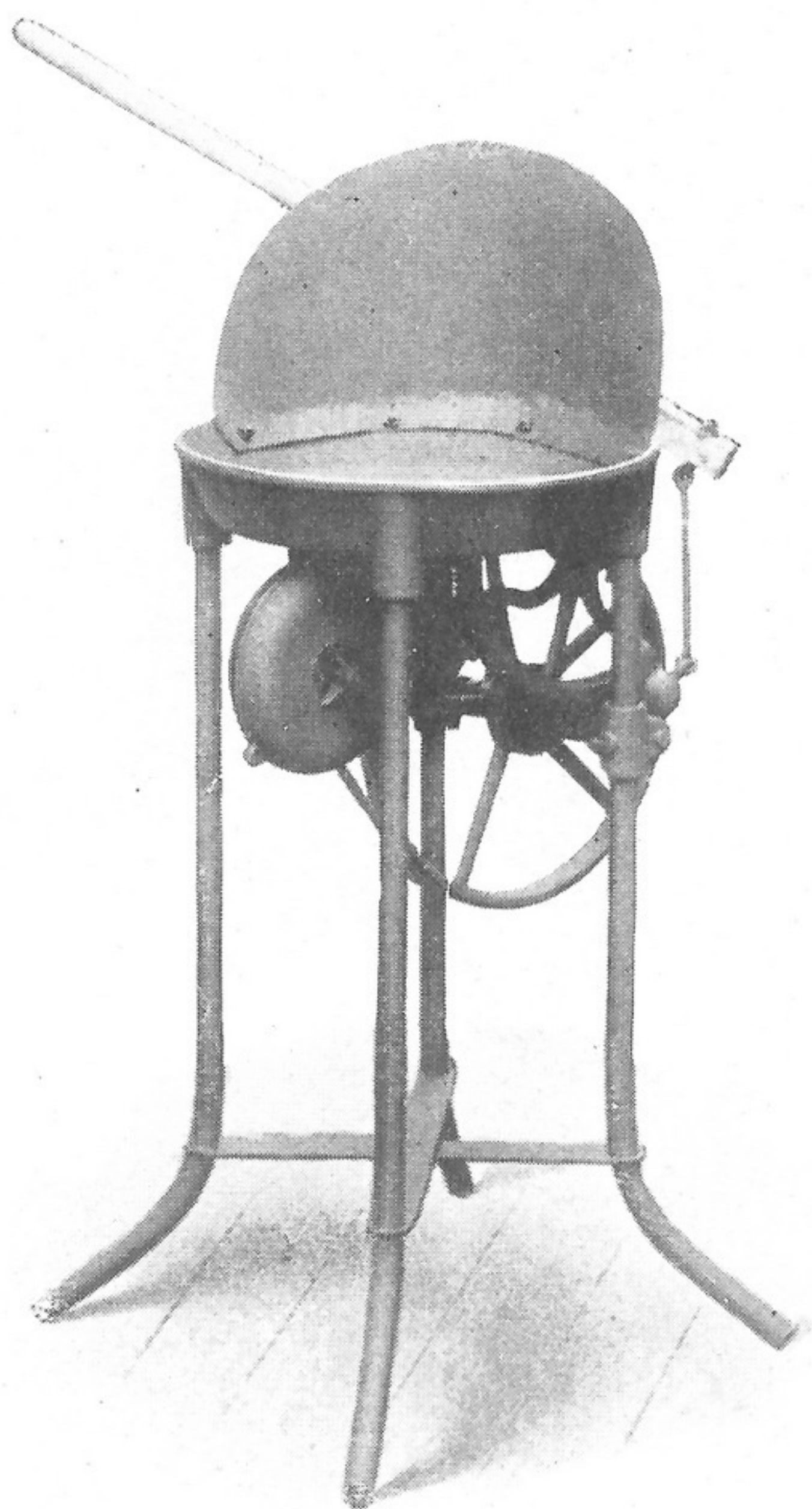
LANCASTER FORGE No. 102.

LANCASTER Forge No. 102, same dimensions and design as No. 100, but with entirely closed hood. Price \$30.00.

The closed hood completely encloses the hearth. Doors at front and back provide for convenient handling of the work and replenishing of the fire. Hood is made of heavy steel. This forge is particularly adapted for planing mills, furniture factories, oil refineries and all shops where inflammable material is used.



# THE LANCASTER FORGE.

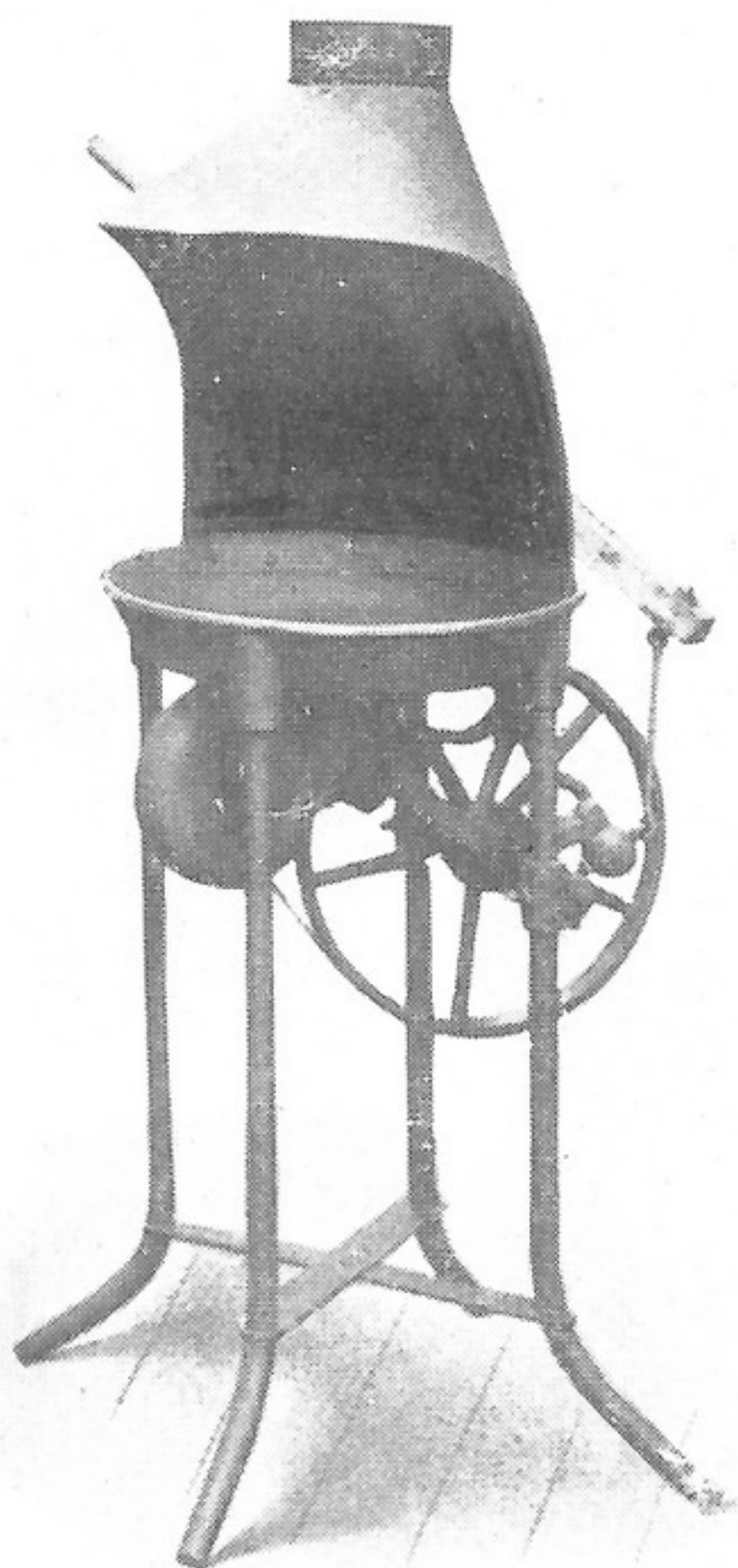


LANCASTER FORGE No. 150.

LANCASTER Forge No. 150 with wind guard ; height 33 inches, diameter hearth 18 inches, weight 65 lbs. Price \$14.00.

This forge is designed especially for the lighter class of all outdoor work, such as rivet heating, light repairing and farmers' use particularly. The operating principle is a most positive and simple device. The ratchet never slips and a strong blast is obtained with a slow lever motion. Nothing about it to get out of order. Very substantial and durable throughout.

# THE LANCASTER FORGE.



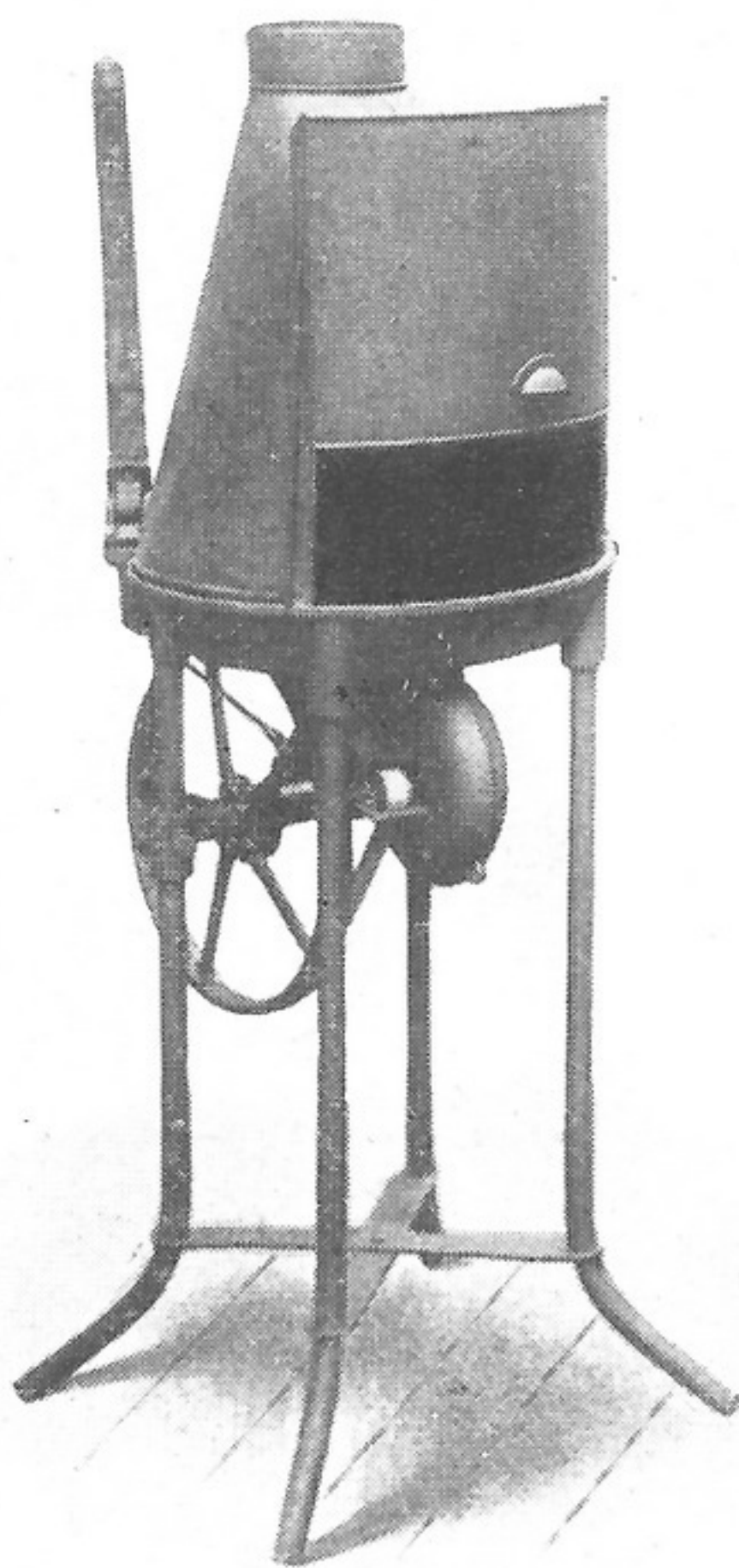
LANCASTER FORGE  
No. 151.

LANCASTER Forge No. 152, same dimensions as No. 150, but with entirely closed hood. Price \$18.00.

The closed-hood type is particularly adapted to jewelers', dentists' and instrument makers' use, as the smoke and fumes are prevented from escaping into the apartment and tarnishing finished and highly polished work. (See cut opposite.)

LANCASTER Forge No. 151, same dimensions as No. 150, but with half-open hood. Price \$16.00.

Adapted for tool makers, plumbers, locksmiths and small manufacturers generally. Suitable for all light to medium indoor work. (See cut.)



LANCASTER FORGE  
No. 152.



# THE LANCASTER FORGES,

## PORTABLE LEVER TYPE.

In presenting the LANCASTER Forges illustrated on the foregoing pages, we wish to direct attention particularly to their durable construction, the positive ratchet engagement (their distinguishing feature) and the convenience and adaptability of the different types for the particular classes of work for which they are designed. These are points too frequently overlooked by manufacturers of portable forges heretofore. Every purchaser of a forge made by this company may be absolutely certain that he is getting a durable, substantial, and thoroughly practical machine, which with ordinary care will last a lifetime. All parts are made interchangeable so that repairs in case of accident may be cheaply and promptly furnished.

In their design all cheap and short-lived spring and other contrivances have been avoided; there can be no slipping under any circumstances, and the wear of the operating parts is reduced to a minimum. They are very carefully assembled, fitted and tested so that the parts are brought into the most intimate relation and stay so, with no "rattling loose" or "wabbly" effects after being in use. In fact, the longer they are used the smoother they work. The best of materials and workmanship alone are employed ensuring a thoroughly efficient tool. Each machine is guaranteed to be strictly as represented.



## THE NIAGARA FORGE.



NIAGARA FORGE No. 50.

NIAGARA Forge No. 50; fan 14½ inches, height 30 inches, hearth 32 x 45 inches, weight 300 lbs. Price without water tank, \$50.00; with water tank, \$55.00.

This forge is designed as a moderate price machine suitable for general blacksmithing. The dimensions correspond closely to our Niagara Forges Nos. 200 and 250. It has a roomy hearth, and the easy lever motion also gives a strong steady blast. For the price it is the best forge on the market. Its durability and excellent service can be fully recommended.



# THE NIAGARA FORGES,

## PORTABLE LEVER TYPE.

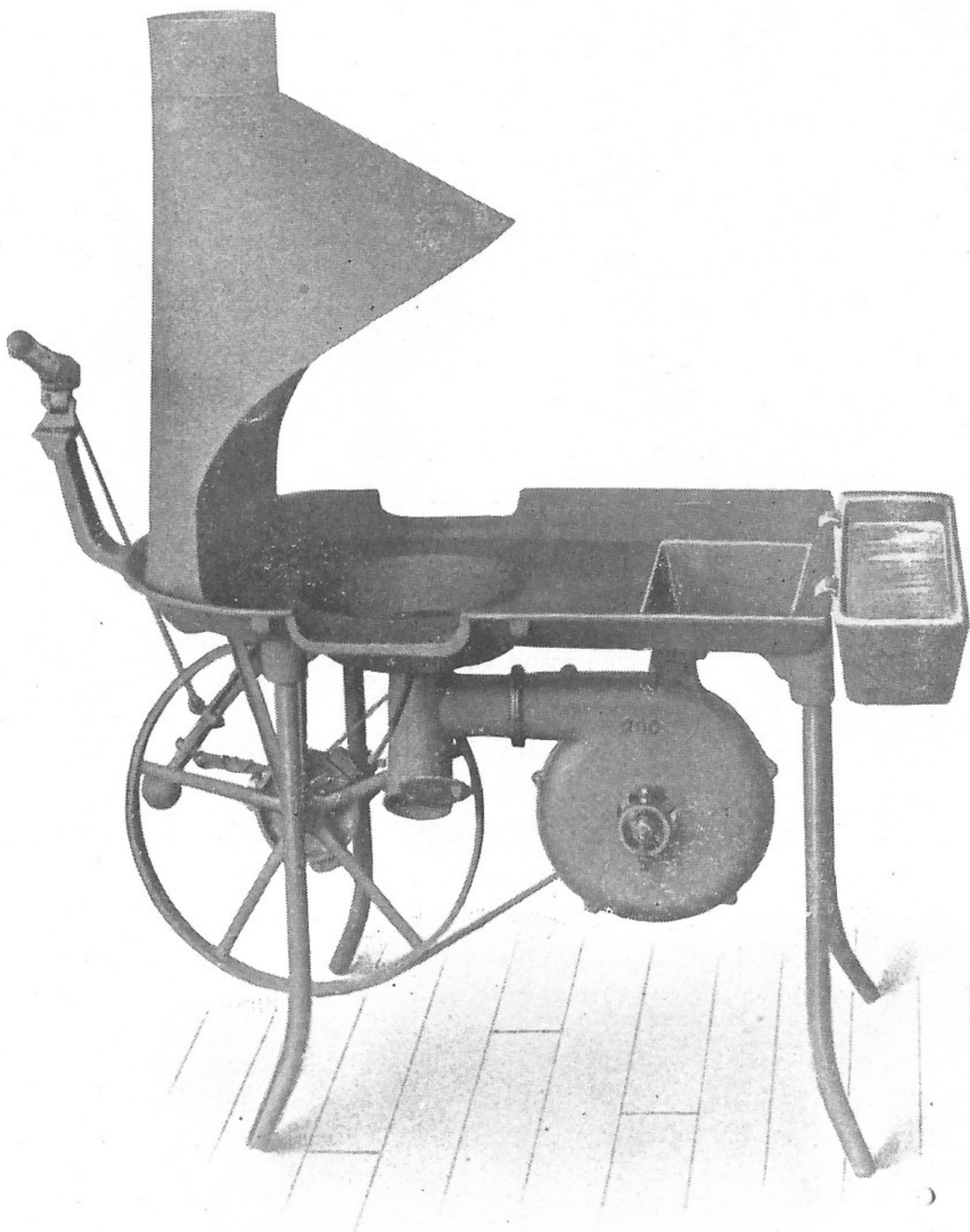
The line of forges illustrated and described in detail on the accompanying pages, will be found to contain machines of suitable capacity for all classes of blacksmith work. A close examination of the different designs will clearly show that each individual machine is particularly suited to the requirements for which it is recommended.

In the construction of the Niagara forges only the best materials and workmanship enter. The greatest accuracy is constantly insisted upon in the erection and assembling of the machines, which results in all parts being brought in the closest relation to each other. The most approved methods of securing them are employed, and the result is there is no gradual rattling loose or becoming wabby after the machines are used for a time. All these defects common to cheap forges will be found to be entirely avoided.

Attention is requested to the dust-proof self-oiling bearings fully illustrated and described on page 13. The equal of these journals is not employed on any other forge on the market, the use of which renders frequent oiling unnecessary. The hearth, coal boxes and water tanks will be found of generous dimensions and of most convenient form. The tuyeres are of special design and thoroughly adequate. The efficiency of a forge is largely dependent upon the blower employed, and in this respect the Niagara machines excel. The fans are all accurately balanced and so designed as to give the strongest and heaviest blast with the least exertion or with minimum power. Each machine is fully guaranteed to be entirely as represented.



# THE NIAGARA FORGE.



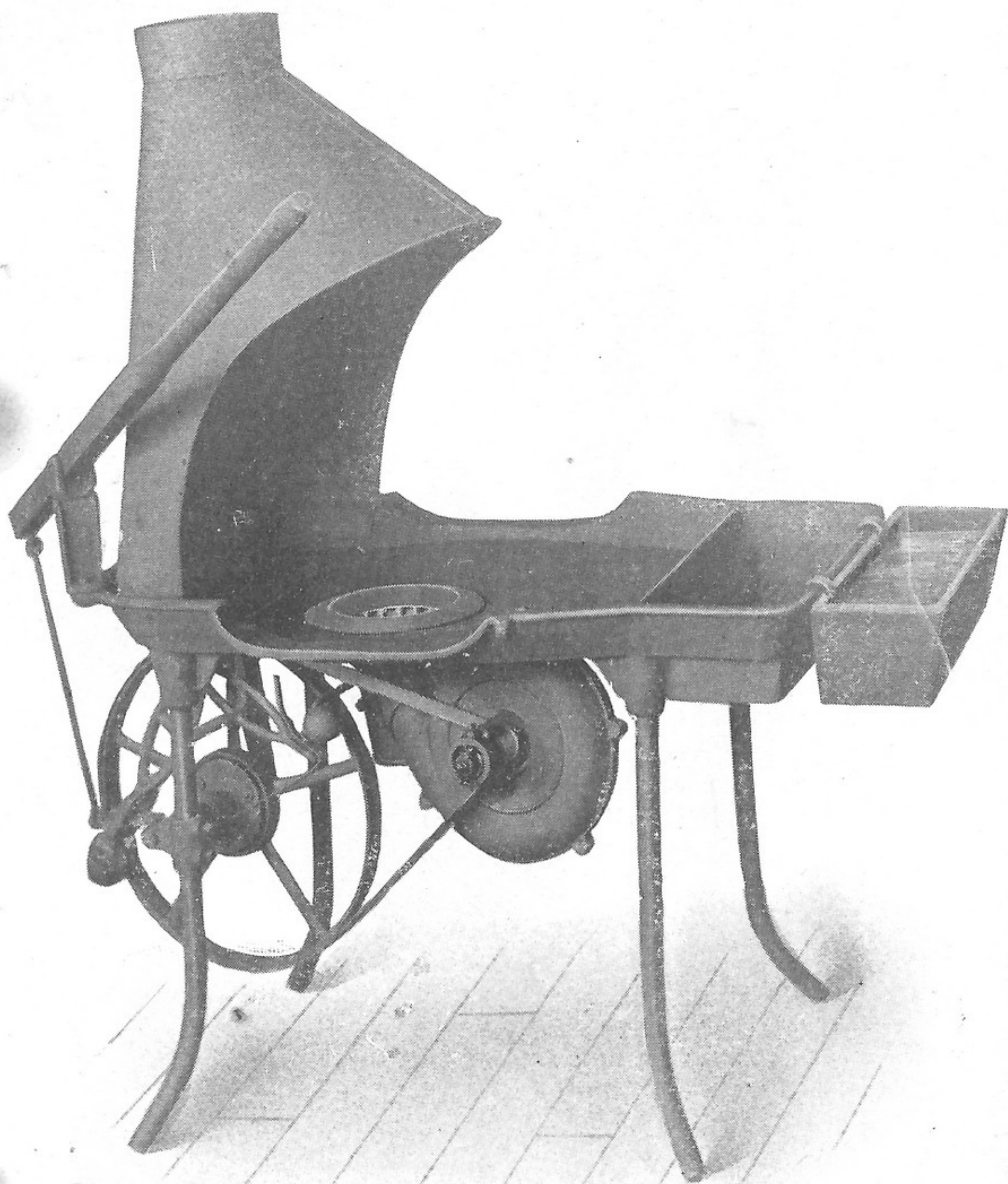
NIAGARA FORGE No. 200.

NIAGARA Forge No. 200 ; fan 16 inches, height 30 inches, hearth 32 x 45 inches, weight 350 lbs. Price with coal box or tank, \$50.00 ; with extra tank (per cut) \$55.00.

This forge has large commodious hearth convenient for laying tools and work upon and the improved coal box with sloping bottom. A three-cornered ball tuyere is used and a special pressure fan gives strong and steady blast. A noiseless friction clutch is employed, and the forge is furnished with the ring-oiler journal bearings (see page 13).



# THE NIAGARA FORGE.



NIAGARA FORGE No. 250.

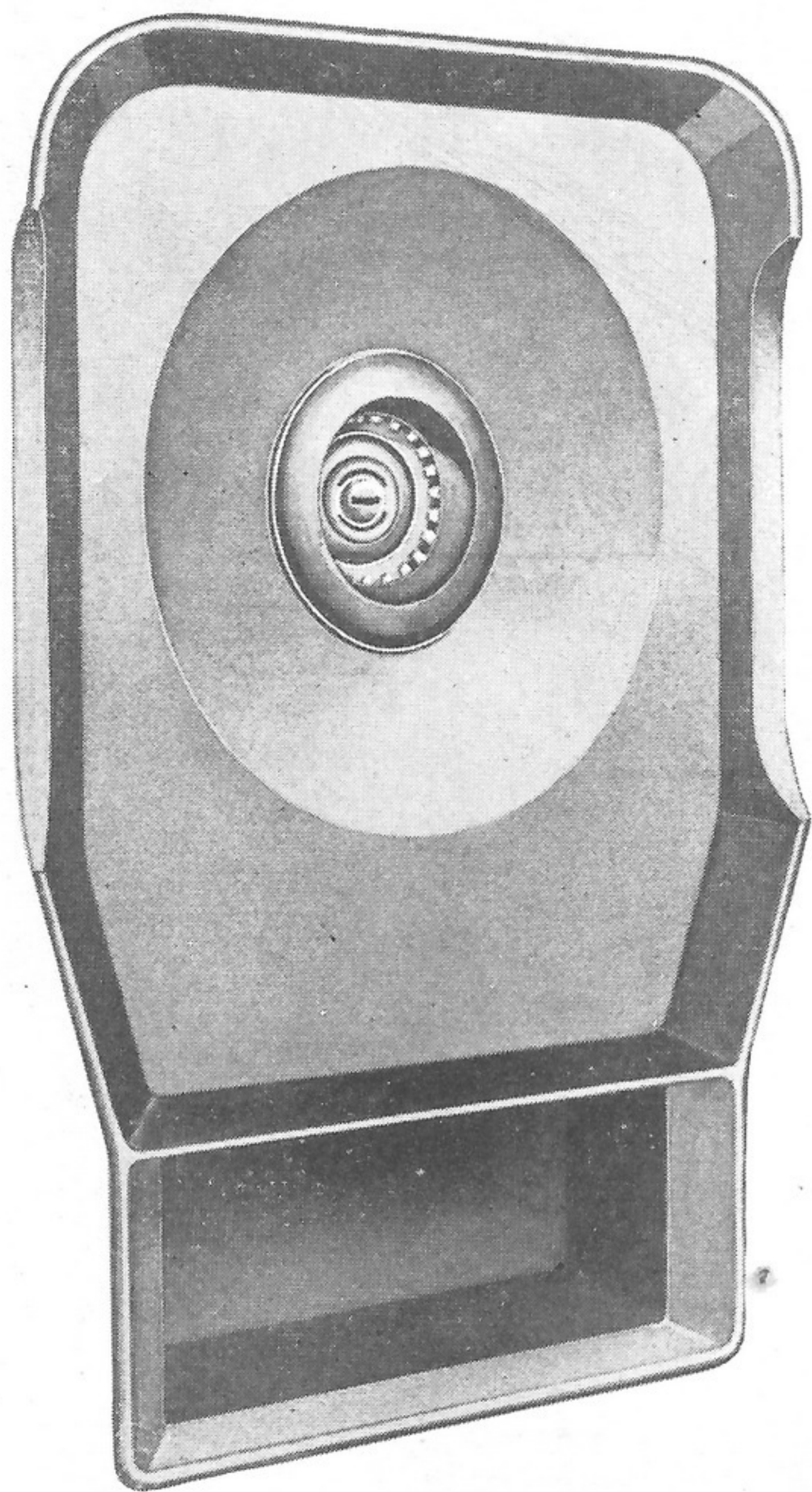
NIAGARA Forge No. 250; fan 16 inches, hearth 33 x 46 inches, weight 300 lbs. Price with coal box or water tank, \$50.00; with extra water tank as shown in cut, \$55.00.

This forge is heavily and durably built, and is adapted to general blacksmith work up to the heaviest. The latest type of ball tuyere with improved fire pot combining center and side blast, and is able to stand continuous heavy work without burning out, an improved steel friction clutch, and our improved ring-oiler journal bearings are furnished.



# THE NIAGARA FORGE,

PORTABLE LEVER TYPE.



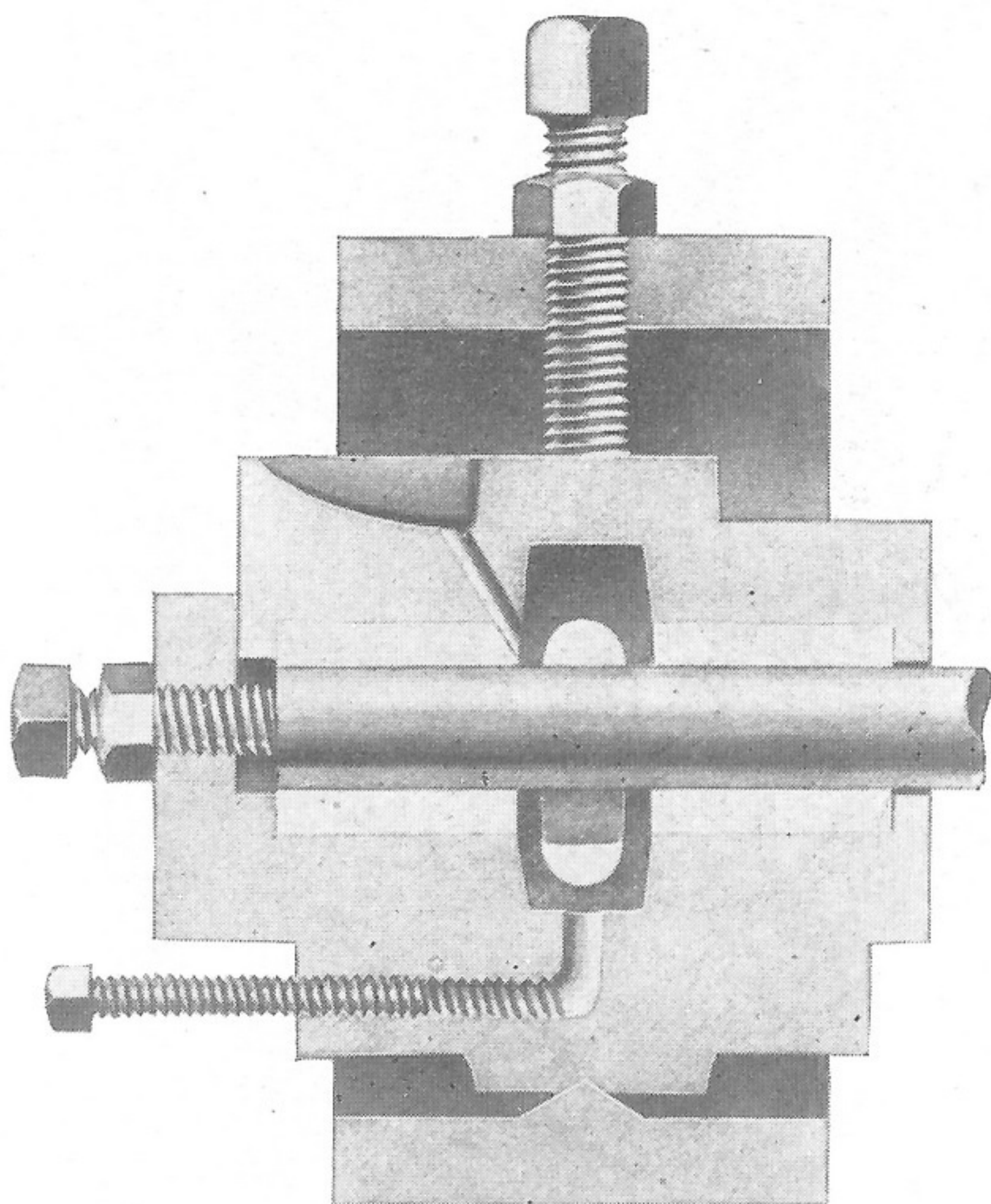
HEARTH OF NIAGARA FORGE No. 250.

The illustration of the hearth of Niagara Forge No. 250, is shown here for the purpose of calling attention to the deep fire pot, the combination center and side blast, special ball tuyere and general commodious arrangement. In all of the above points this forge will be found to excel anything of its kind upon the market. It is by all odds far in advance of any forge of this type yet offered. The above features command at once the attention of discriminating buyers everywhere.



# THE NIAGARA RING-OILING BEARINGS,

IMPROVED DUST-PROOF TYPE.



USED EXCLUSIVELY ON NIAGARA FORGES.

The above diagram illustrates the leading features of this bearing. It will be noted that the lower part of the box constitutes an oil chamber in which the oil ring revolves over the shaft, perfectly and equally distributing the oil over all parts of the bearing; the excess of oil being returned to the oil chamber. One oiling will last for months. The faster the shaft is revolved the greater is the supply of oil fed to the bearing, so that perfect lubrication is maintained at all times, and it is impossible for the journal to heat while there is a particle of oil in the chamber. As soon as the supply of oil in the chamber gets low the ring makes a rattling noise thus giving warning to replenish the supply. This warning is given amply in advance so as to allow it to run some time without injury. The greatest improvement ever applied to a portable forge. No grit can work into these bearings.



## THE NIAGARA FORGE.



NIAGARA FORGE No. 300.

NIAGARA Boilermakers' Forge No. 300 with wind guard; hearth 23 x 35 inches, fan 12½ inches, height 30 inches, weight 120 lbs. Price \$36.00.

This forge has an extra large hearth and fan making it not only superior in capacity to forges customarily used for this class of work, but allowing room for extra coal supply, also accommodating tools and work. It has an improved tuyere with ball valve and the oil-ring journal bearing described with our No. 200 Forge. This forge is designed especially for boilermakers, tank builders, railroad contractors and all outdoor construction work. It works very smoothly and noiselessly and in durability it has no equal on the market. Will produce welding heat on 3-inch iron in five minutes.



# THE NIAGARA FORGE.



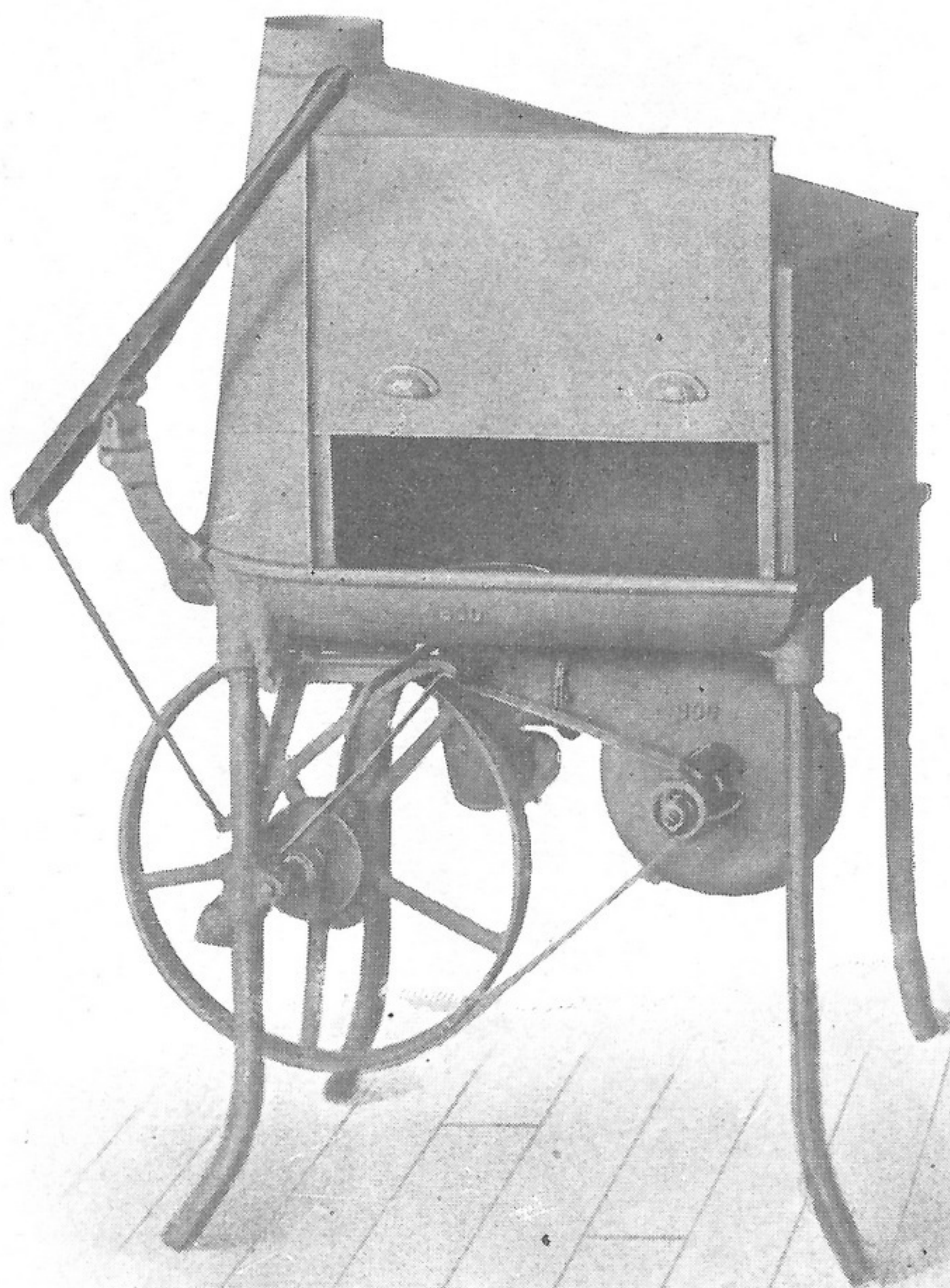
NIAGARA FORGE No. 301.

NIAGARA Machinists' Forge No. 301 with half-hood; hearth 23x25 inches, fan 12½ inches, height 30 inches, weight 130 lbs. Price \$40.00.

This forge is same design and dimensions as No. 300, but with half-open hood for smoke removal. For machine shops, stone cutters, railroad repair shops, mills, mines and general indoor work this forge will be found to be unsurpassed. No other of this class is so well adapted for surgical instrument factories, fine tool rooms or other uses where smoke and fumes are particularly objectionable. Perfectly noiseless in operation. Our ring-oiling journals, see page 13, are used on the forge.



# THE NIAGARA FORGE.



NIAGARA FORGE No. 302.

NIAGARA Forge No. 302 with entirely closed hood; hearth 23 x 35 inches, fan 12½ inches, height 30 inches, weight 140 lbs. Price \$42.00.

This forge is of the same design and dimensions as the Nos. 300 and 301, but with entirely closed hood having large sliding door in front with smaller door in back, thus permitting heating long bars and rods in the middle, and handling the work with greater convenience. This type of hood effectually prevents the escape of fumes, smoke and sparks. Its operation is perfectly noiseless. Our ring-oiling bearing on page 13, is used on this machine.



# THE NIAGARA FORGE.



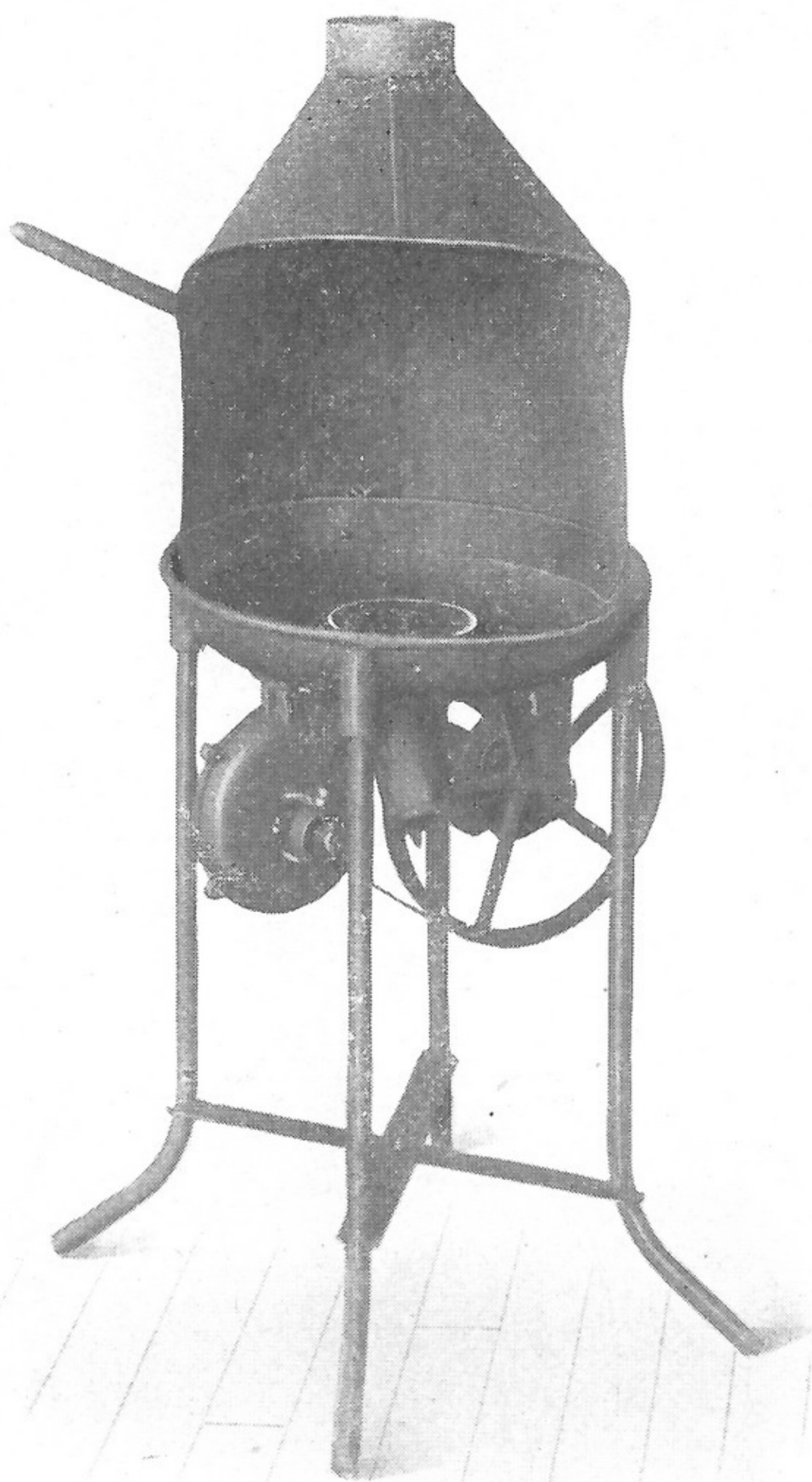
NIAGARA FORGE No. 350.

NIAGARA Riveters' Forge No. 350 with wind guard; hearth 22 inches diameter, fan 10 inches, height 33 inches, weight 80 lbs. Price \$24.00.

This forge as shown by the cut is designed especially for outdoor riveting work. It is adapted to bridge, tank, ship builders', railroad, contractors', and prospectors' use.

The machine is very strong, compact and at the same time light enough to be readily carried about. It is furnished with our improved journal bearings. The operation is perfectly noiseless, and the blast is strong and steady.

# THE NIAGARA FORGE.



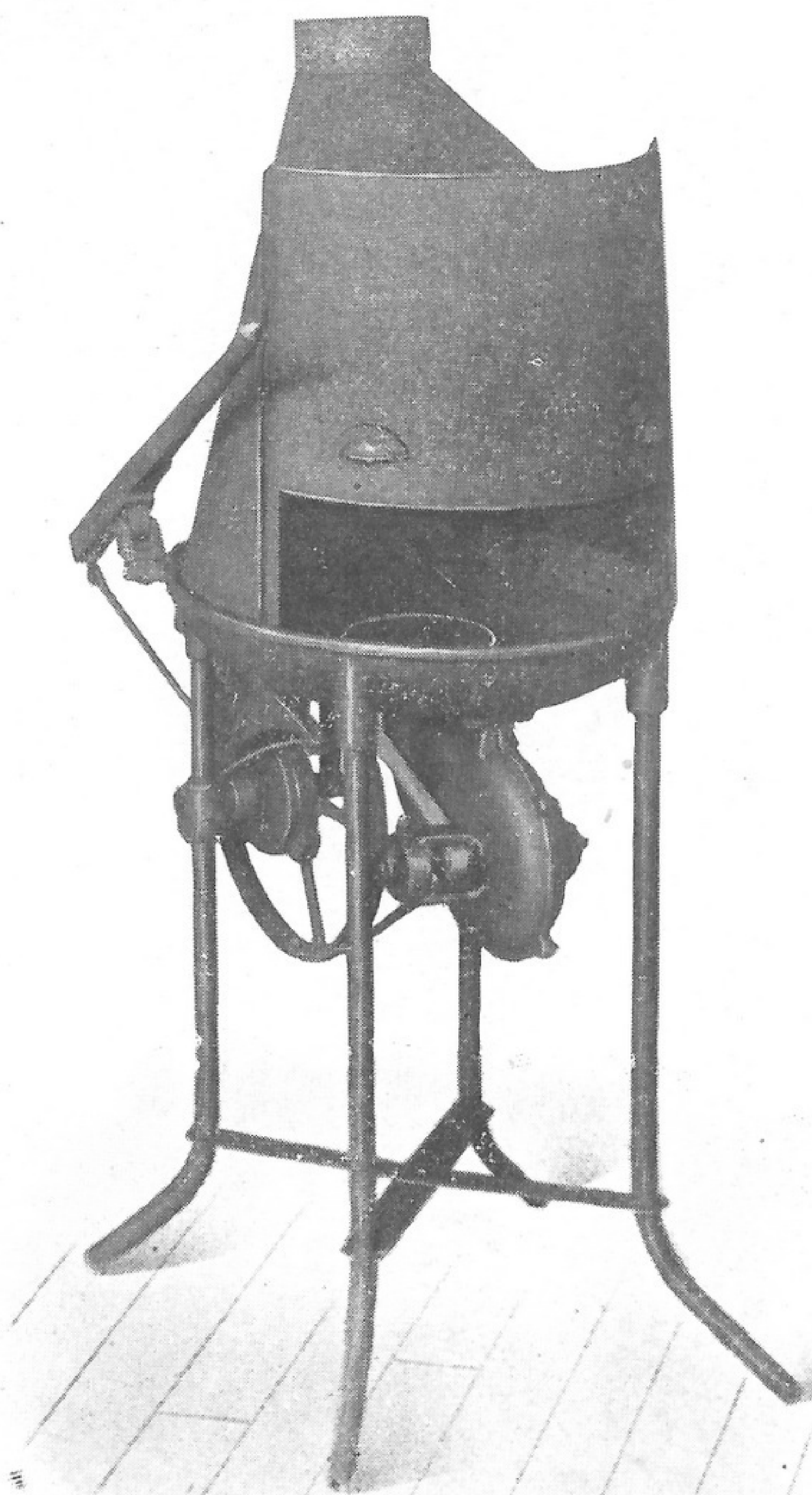
NIAGARA FORGE No. 351.

NIAGARA Tool Makers' Forge No. 351 with half-hood ; hearth 22 inches diameter, fan 10 inches, height 33 inches, weight 85 lbs. Price \$27.00.

This forge is indispensable to any well equipped machine shop tool room, manufacturing jewelers' or bicycle repair shop. Design and dimensions same as No. 350 Forge, but with half-open hood for carrying off smoke. Nothing complicated or frail in its construction, and it is capable of being worked indefinitely without repairs.



## THE NIAGARA FORGE.

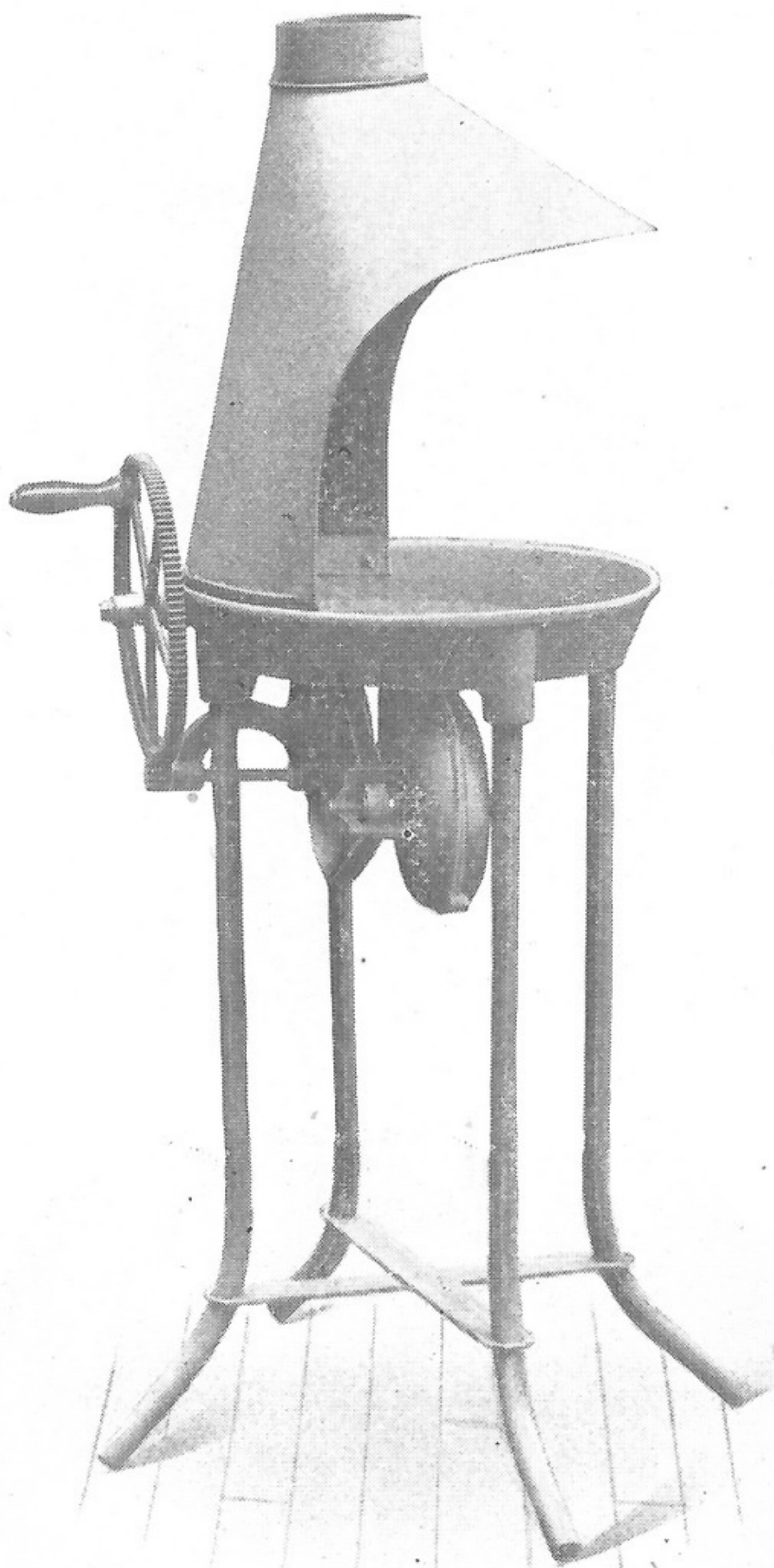


NIAGARA FORGE No. 352.

NIAGARA Jewelers' Forge No. 352 with entirely closed hood; hearth 22 inches diameter, fan 10 inches, height 33 inches, weight 90 lbs. Price \$30.00.

Design and dimensions same as Nos. 350 and 351 Forges, but with hood entirely closed. The large sliding door in front and smaller door in rear, affords convenience in handling long bars, etc., prevents escape of sparks, fumes and smoke. The forge is noiseless, durable and has strong blast. Our ring-oiling journals on page 13, are used on this machine.

# THE NIAGARA FORGE.



NIAGARA FORGE No. 401.

Niagara Forge No. 400 with wind guard, Price \$14.00

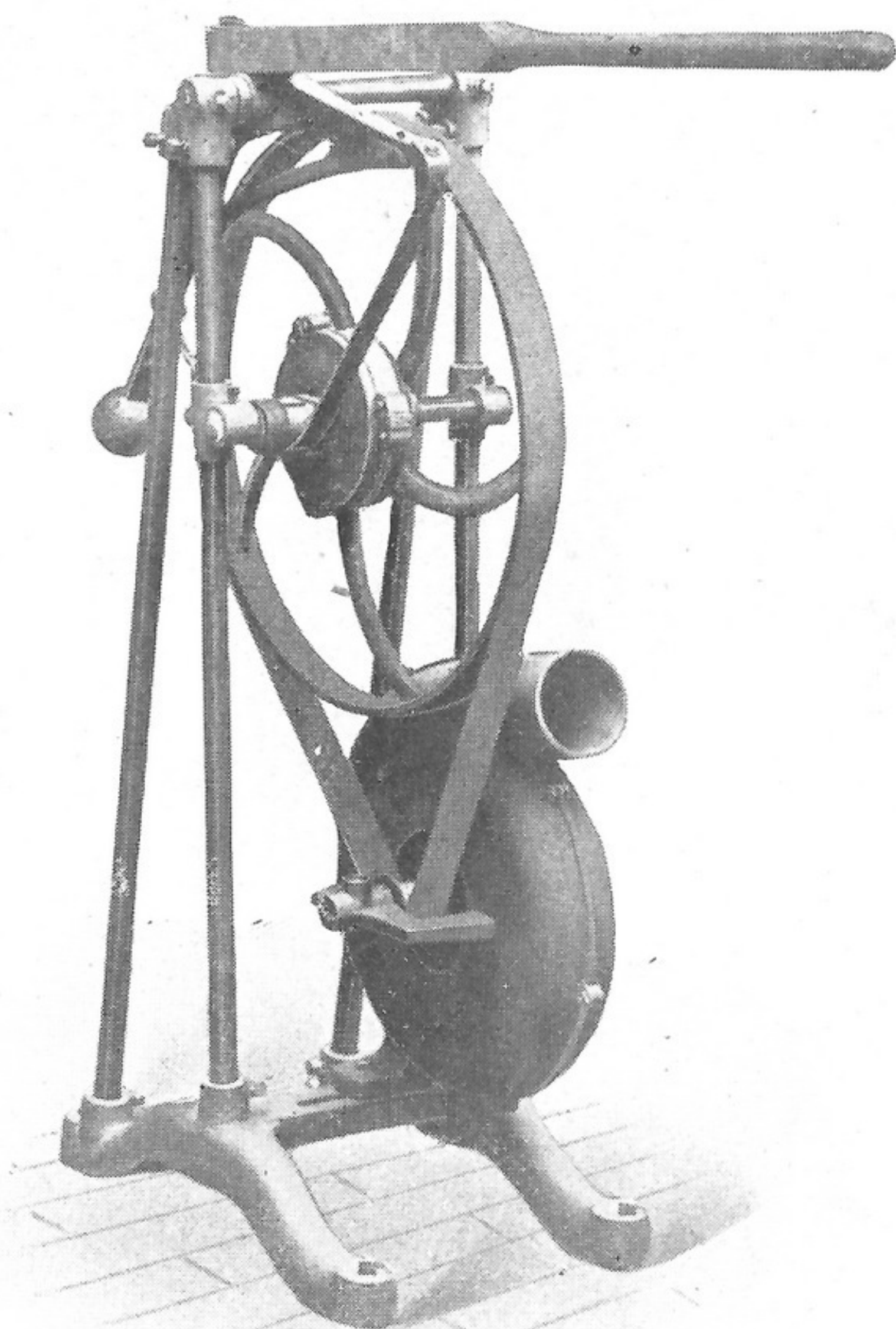
Niagara Forge No. 401 with half-hood, " 16.00

Niagara Forge No. 402 with closed hood, " 18.00

This forge has a crank motion, and is designed chiefly for farmers and light repairing work. While sold at a very low price, this machine will be found to be durably built and excellently adapted for the purpose for which it is designed.



# THE NIAGARA BLACKSMITHS' HAND BLOWER, WITH TUBULAR STEEL FRAME.



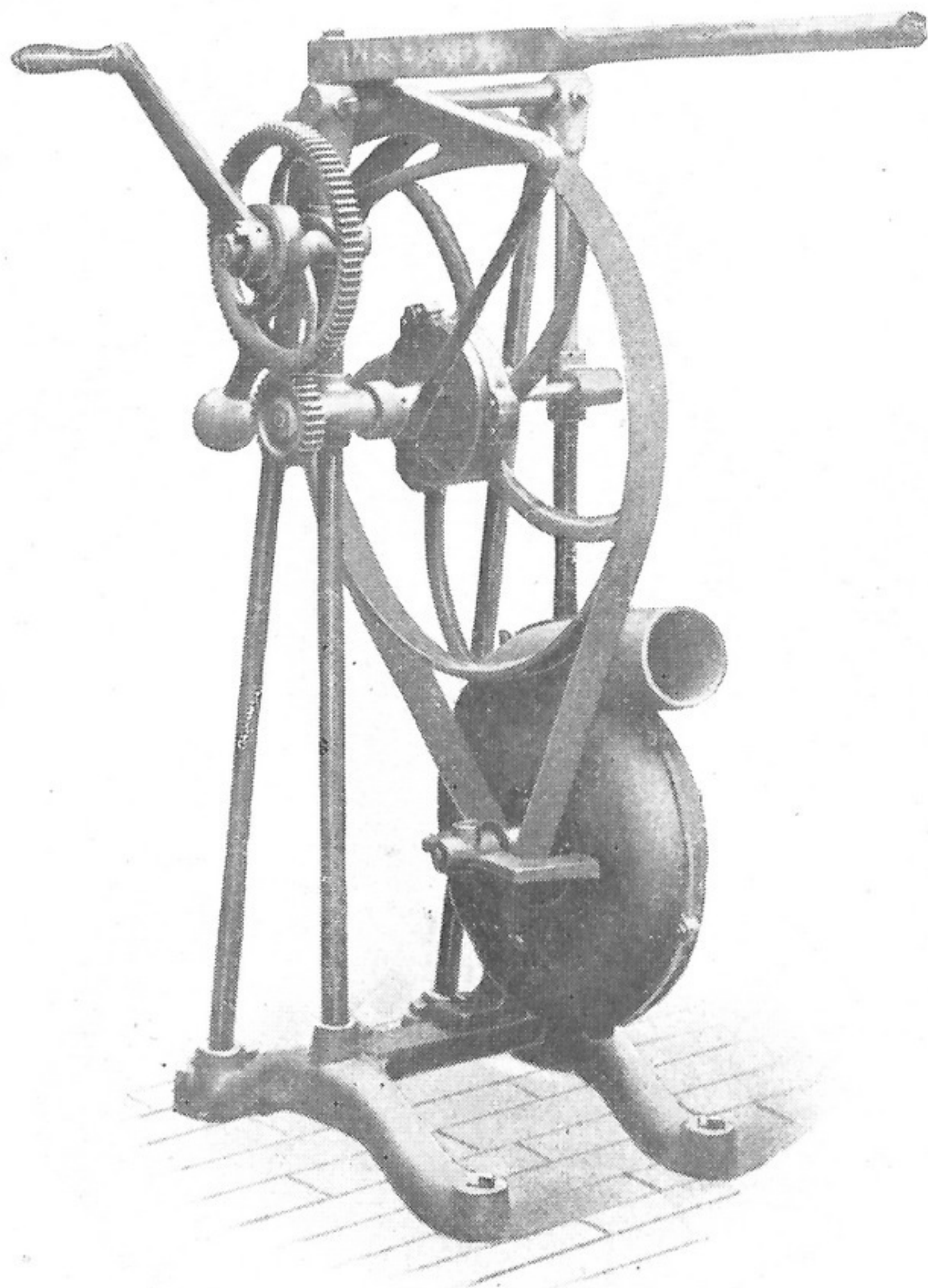
NIAGARA HAND BLOWER No. 450.

NIAGARA Steel Frame Hand Blower No. 450; fan 17 inches. Price with tuyere and pipe \$20.00; without tuyere and pipe \$18.00.

This lever hand blower is noiseless, very simple in construction and design. It is geared to an extra large fan, thus giving a larger capacity than any other blower on the market. The tubular steel frame affords greatest strength and rigidity without being cumbersome. The ease of operation combined with the strong blast have made it a favorite with the blacksmiths. All shafts are of steel with long and heavy journals.



# THE NIAGARA BLACKSMITHS' HAND BLOWER, WITH TUBULAR STEEL FRAME.



NIAGARA HAND BLOWER No. 451.

NIAGARA Tubular Steel Frame Hand Blower No. 451 ; fan 17 inches. Price with tuyere and pipe \$22.00 ; without tuyere and pipe \$20.00.

This blower with its combined lever and crank motion is similar in design and construction to our No. 450 Blower, which has met with such immediate popularity among blacksmiths, but has in addition the crank attachments so that it can be operated either by crank or lever, as the operator may prefer. No alteration or adjustment whatever is required to change from lever to crank motion or vice versa. Very strong and powerful blast.



# THE NIAGARA BLACKSMITHS' HAND BLOWERS,

WITH TUBULAR STEEL FRAME.

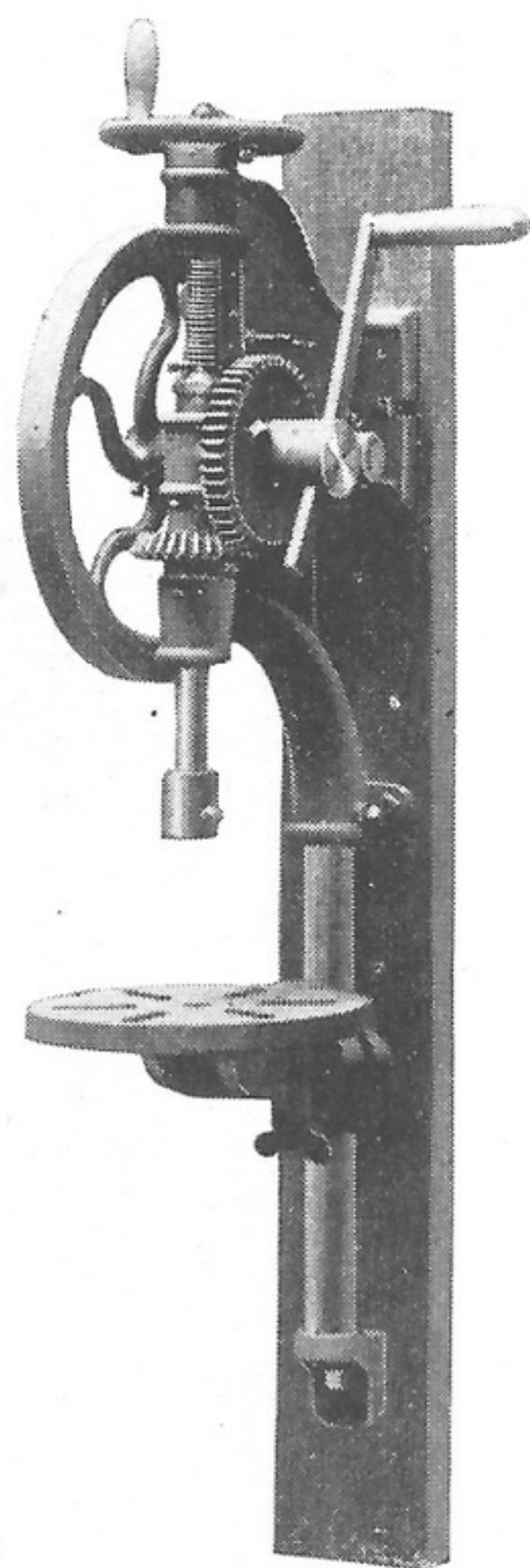
These machines represent the latest improvement in design and construction of blacksmiths' hand blowers. A tubular steel frame on a heavy cast-iron base is employed and the manner in which these machines are erected makes them practically indestructible. They are of extra strength and stiffness, and will stand the heaviest service found in indoor and outdoor work. The fans are of large capacity and are operated with great ease, affording a heavy blast of air. Either style may be furnished with or without tuyere and pipe connection as desired.

As will be noted the running gear is most simple. The frames are braced thoroughly, at the same time the weight of the machine is so reduced as to render these tools readily portable. These blowers were first built for the usual blacksmith shop fire where a brick forge is used, but they are now applied for many other purposes.

Each machine is carefully tested and fully guaranteed. All material used is first grade. The most careful and skilled workmen only are employed.

# THE NIAGARA BLACKSMITHS' DRILL,

FOR HAND POWER.



THE NIAGARA DRILL No. 120.

THE NIAGARA Blacksmiths' Drill No. 120 ; weight 125 lbs. Price \$10.00. Tight and loose pulleys for power, extra, \$5.50 ; tight and loose pulleys for power, without fly-wheel, \$3.00 ; chuck to take square shank drill bits, \$1.00.

Size of spindle 1 inch, extreme distance of spindle from table  $14\frac{1}{4}$  inches, drills to center of 15 inch circle and up to  $1\frac{1}{4}$  inch holes, all spindles are bored for  $\frac{1}{2}$  inch round shank drill bits unless ordered otherwise. The best drill for the price on the market. Substantially built and made of the best materials throughout.



# THE NIAGARA BLACKSMITHS' DRILLS,

FOR HAND AND BELT POWER.

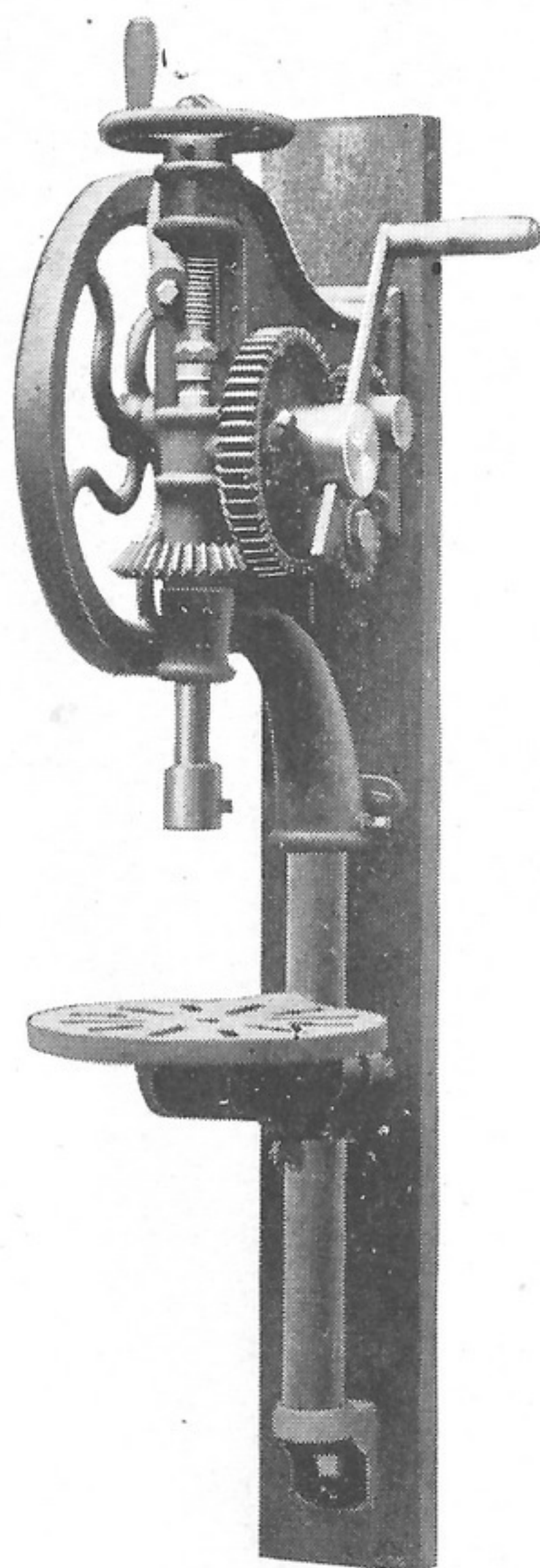
The Blacksmith will find in these drills a thoroughly durable and efficient tool that cannot be surpassed for the cost by any others on the market. The bearings are large and of excellent proportions, and combined with the carefully prepared gears afford a machine, which in point of easy running, will be a surprise to all. All shafts and screws are of the best steel, and as will be noted by the description of each drill the design will be found fully up-to-date.

There are many low priced drills being offered, but the superiority of these machines have been at once recognized and they have met with great favor wherever sold. The greatest care and accuracy is exercised in the construction of every part, in the selection of material, and in assembling. In this way there can be but one result, namely, a thoroughly efficient tool.

The Niagara Drills will be found to include more desirable features than any others of the same capacity. Each machine is carefully tested before shipment and fully guaranteed in every respect.

# THE NIAGARA BLACKSMITHS' DRILL,

FOR HAND OR POWER WITH VARIABLE SPEED.



NIAGARA DRILL No. 130.

THE NIAGARA Blacksmiths' Drill No. 130; weight 175 lbs. Price \$16.00. Tight and loose pulleys for power, extra, \$6.00; tight and loose pulleys for power, without fly-wheel, \$3.00; chuck to take square shank drill bits, \$1.00.

Size of spindle  $1\frac{1}{8}$  inches, run of spindle 3 inches, extreme distance from spindle to table  $16\frac{1}{2}$  inches, drills to center of 18 inch circle and up to  $1\frac{1}{4}$  inch holes. All spindles are bored for  $\frac{1}{2}$  inch diameter shank drill bits unless ordered otherwise. Triple geared. Best moderate price drill on the market. Thoroughly well made and the best of material employed in the construction throughout.



# THE NIAGARA AND LANCASTER BLACKSMITHS' TOOLS.

## A WORD TO PURCHASERS.

All the machines offered in this catalogue we believe to be unsurpassed by any others in design, material or workmanship. They are carefully constructed throughout. Our constant aim is to attain a standard heretofore unreached in the manufacture of portable forges, hand blowers and blacksmith drills. By building in large numbers, purchasing material in quantity, and being content with a small margin of profit, we are enabled to offer these goods at a low price compared with their value.

Every machine before being shipped is carefully tested to a high standard, which enables us to guarantee every tool sold. Purchasers may invariably rely upon our sparing no pains or expense in the construction of Niagara and Lancaster tools. They will invariably be found second to none on the market. The best materials alone are used and a higher standard of machine work is required in building than is practiced by other manufacturers.

LANCASTER FORGE AND BLOWER CO.

NIAGARA AND  
LANCASTER PORTABLE FORGES,  
BLOWERS AND DRILLS.

WORKS : LANCASTER, N. Y.

OFFICE : BUFFALO, N. Y.

FOR SALE BY